The Timing of the Research Question: First-Year Writing Faculty and Instruction Librarians' Differing Perspectives

portal: Libraries and the	Academy	2010

Nutefall, Jennifer E.
OSU Libraries, Oregon State University

Ryder, Phyllis Mentzell George Washington University

This is the author's peer-reviewed final manuscript, as accepted by the publisher. The published article is copyrighted by The Johns Hopkins University Press and can be found at: http://www.press.jhu.edu/journals/portal_libraries and the academy/.

Citation: Nutefall, J. E., & Ryder, P. M. (2010, October). The timing of the research question: First-year writing faculty and instruction librarians' differing perspectives [Electronic version]. *portal: Libraries and the Academy*, 10(4), 437-449. doi:10.1353/pla.2010.0009

The timing of the research question: First-year writing faculty and instruction librarians' differing perspectives

Jennifer E. Nutefall and Phyllis Mentzell Ryder

Contact Information:

Jennifer E. Nutefall, Associate University Librarian for Innovative User Services, Oregon State University Libraries

Jennifer.Nutefall@oregonstate.edu

Phyllis Mentzell Ryder, Associate Professor of Writing, George Washington University pryder@gwu.edu

Abstract

Faculty and librarians agree on the qualities of a good research question. However, in an exploratory study, they differed on when students should develop their research question. While librarians stated that students should develop their question early, first-year writing faculty advocated for delaying the development of the research question. The timing of the research question is an important issue as it has implications for the structuring of research assignments and library instruction, as well as having an impact on the students who get differing messages.

Introduction

The initial focus of this exploratory study was how first-year writing faculty and instruction librarians use terms in divergent ways and was based on a miscommunication between first-year writing faculty and librarians during a summer 2002 workshop around the use of the term "keywords." That moment provided an opportunity for discussion and learning, and it led the researchers to examine, through interviews, if there were other times that first-year writing faculty and librarians used similar terms differently. However, after several months of in-depth analysis of interview transcripts, the focus of the study shifted to the qualities and timing of the research question after the analysis of the interviews revealed a disparity in how faculty and librarians conceptualize the research process. While both groups refer to the same general steps (identifying a topic to explore, finding relevant resources, and synthesizing the sources within a final written text), they disagree about when students should be expected to narrow their research question. This disagreement affects library instruction and how librarians work with students at the reference desk and in individual consultations. This article will: 1) provide an overview of the literature on the development of questions in the research process in both the library and composition literature; 2) present the results of the exploratory study asking faculty and librarians about the qualities of a good research question; 3) discuss the differences in faculty and librarians' opinions on when students should develop research questions; 4) and offer suggestions for reconciling these differences.

Literature Review

Many articles in the library literature address collaborations and partnerships between librarians and faculty in first-year writing programs but these articles tend to focus on the partnerships themselves, with only general mentions of course assignments. This literature review focuses

specifically on those articles in the library and composition literature that address the development of the research question or thesis statement.

First, both Kuhlthau and Bates's theories of information behavior are relevant to the discussion on the timing of the research question. Kuhlthau developed the information search process (ISP) which outlines six stages that users experience in the process of information seeking. In the first three stages of the ISP, initiation, selection, and exploration, students investigate a topic and potential research focus areas. It is not until the fourth stage, formulation, when students really focus their topic. Kuhlthau writes that "while a focus may be formed in a sudden moment of insight, it is more likely to emerge gradually as constructs become clearer." The final two stages in the ISP are collection and presentation. Kuhlthau concludes by stating that

formulation of a focus is a critical concept in the model of the ISP. While a focus rarely takes the form of a formal hypothesis, as depicted by Kelly, a clear formulation reflecting a personal view of the information encountered is the turning point of the search. At this point, confidence increases, confusion decreases, and interest intensifies. The user's ability to specify his or her problem is considerably enhanced after a focus has been formed.³

In the ISP model, students start their research with a vague and uninformed topic, rather than a specific research question, and it is not until the fourth stage that students begin to fully understand their topic and focus their research.

Bates developed the berrypicking model for information seeking which outlines the ever-evolving search that users experience. Berrypicking is defined as a "bit-at-a-time retrieval" in which users pick up new information each time their search evolves. 4 She writes that users move through a variety of sources and "each new piece of information they encounter gives them new ideas and directions to follow and, consequently, a new conception of the query." 5 Although the relationship Bates discusses is between the user and the information retrieval system, the idea of a constantly changing question is very relevant to the timing of the research question.

When students focus their research questions too early, the result could be a false focus.

Kennedy, Cole, and Carter define a false focus as when a student chooses a topic and thesis "based on expediency, without consideration of the contextual placement of the topic or personal interest." Among the many downsides of a false focus is that it leaves students unable to integrate their own thinking on the topic which leads to an ill-thought out paper with an undefined conclusion. Kennedy et al. also argue that librarians may be contributing to students' development of false focus. When working with students at the reference desk, most librarians want to help students find a manageable focus with a controlled search results list. Kennedy et al. posit that librarians are doing students a disservice when they are in the prefocus stage by forcing them to focus too quickly. For those students in the prefocus stage, the authors suggest librarians assist them by conducting a high recall search, explaining why the results are so high, and providing suggestions for using the citations to discover individual interests.

Another issue with the timing of the research question occurs when students try to mimic the research process of scholars. Bodi discusses how scholars approach research through their knowledge of the discipline, understanding of theories or paradigms, and recognition of prominent names in the field. When students try to mimic the scholar's process without having this overall knowledge, they often flounder and search in a haphazard way. To assist students in finding a topic and focus, Bodi offers three suggestions: asking guidance from faculty members, having students ask questions about the topic, and becoming knowledgeable about the predominant mode of communication in a discipline. The focus on asking questions is key as it allows students to think more deeply about a topic. Bodi states that "questions define tasks, express problems, and delineate issues. Questions drive our thoughts beneath the surface and force us to confront complexity." Bodi also offers a series of guiding questions that can help

students gain the background knowledge they need in order to refine a topic, as well as a series of questions that help students determine what types of sources will be most appropriate.

In addition, several articles in the composition literature focus on the research question or thesis statement. Rosenwasser and Stephen discuss an evolving thesis that is based on questions. The authors write

The view of the thesis as fluid and dynamic, growing and changing as it encounters evidence, goes against the way most textbooks present the thesis. They see the thesis as the finished product of an act of thinking: an inert assertion to be marched through a paper from beginning to end. But if you actually study how a thesis behaves in a piece of writing – if you track its recurrences through an essay – you'll see that a strong thesis evolves; it is not static.⁹

The problem with static thesis statements, the authors state, is that they are "imprecise, overly general, and redundant." So how does a thesis evolve? The authors describe a six steps process:

- 1. Formulate an idea about your subject a working thesis
- 2. See how far you can make this thesis go in accounting for (confirming) evidence
- 3. Locate complicating evidence that is not adequately accounted for by the thesis
- 4. Make explicit the apparent mismatch between the thesis and selected evidence, asking and answering so what?
- 5. Reshape your claim to accommodate the evidence that hasn't fit
- 6. Repeat steps 2, 3, 4, and 5 several times. 11

Bizup also argues for a different view of thesis statements and research questions. His approach towards sources, called BEAM, focuses on how students can best use sources. BEAM stands for background, exhibit, argument, and method and Bizup writes that this is a better approach for students then the traditional primary/secondary/tertiary source distinction. Bizup writes that he tells his first-year writing students to use exhibit sources which provide specific examples to back up a claim and allow students to analyze or interpret the material as a starting point. This method is more useful than simply telling students to narrow their topic. The BEAM method can also assist students in developing viable projects. He states

It is now a commonplace of writing pedagogy that students need to turn "topics" into "problems" or "questions," and many guides to research-based writing offer suggestions intended to facilitate this transformation. Much of this advice rests on the presumption that students must begin by identifying well-defined topics. As a writing teacher trained in the humanities, however, I find this presumption a bit problematic. I tend to value writing that creates novel conjunctions or raises surprising questions or resonates with implications for a range of fields, and I worry that if students settle on—or for—their topics prematurely, they will miss opportunities to do interesting and creative intellectual work. I therefore guide my students to proceed not by picking topics at the outset but by pursuing the often unexpected lines of inquiry that emerge from their encounters with concrete sources. ¹²

In comparison to the work in the composition and library literature traditional writing handbooks address this issue very differently. Instead of describing a process where a focus occurs over time writing handbooks describe topic formulation as one of the first steps in the research process. In Lunsford's popular *The Everyday Writer*, formulating a research question and hypothesis is the second step in a research project, after analyzing the research assignment. Lunsford writes "Once you have analyzed your task, picked a topic, and narrowed it, formulate a research question that you can tentatively answer with a hypothesis." Similarly, Hacker's *A Writer's Handbook* starts off the research section with a discussion of questions worth exploring. The assumption in all these sources is that students formulate their questions before doing any research, rather than allowing their research to inform and assist them in developing their questions.

Yet Braun and Prineas, from the University of Arizona, take a different approach in their handbook *A Student's Guide to First-Year Composition*.¹⁵ When discussing the research methods scholars use, the authors write that "less experienced researchers who are just entering the scholarly conversation should be careful not to jump to hasty conclusions, because they need to follow their research where it leads." Their argument is that novice researchers tend to find information that will fit into the argument they want to make and dismiss arguments that contradict their own. They state that expert researchers "approach research as a necessary step

before participating in the scholarly conversations occurring in their disciplines. They realize the need to read first, to keep an open mind as they read, and to revise their original assumptions in the face of new knowledge."¹⁷ The authors provide a specific example of a student starting research without a clear thesis and how the thesis was developed in conjunction with the research discovered. They go on to discuss how once students have a general topic in mind, they should read broadly about the issue and learn all of the arguments in the field.

This review of the literature has covered Kuhlthau's and Bates's theories of information behavior and the library and composition literature related to the use of questions and the timing of the research question. While there is some agreement in the literature that students should delay the development of their research questions, first-year writing faculty and librarians need to work together on how best to assist students in developing their research questions at an appropriate time. The literature does not currently show the cooperative work on conversations that must then take place between first-year writing faculty and librarians. This cooperation is necessary to ensure that first-year writing faculty and librarians talk openly about the timing of students' research questions, the issues for students who focus their topic prematurely, and strategies for assisting students with the discomfort they experience at the beginning of the research process.

Exploratory Study

The first-year writing course at George Washington University (GWU) is University Writing 20 (UW20), a four-credit, one semester course required of all freshmen. UW20 courses are themebased and are capped at 15 students per section. The theme-based approach of the program is based on the "assumption that good writing and good research happen when students consider the writing/research process within a particular context, with a particular purpose, and with a particular audience."

An important part of UW20 is the partnership between faculty and instruction librarians. Each semester faculty and librarians are partnered according to interest and research expertise and ongoing partnerships are supported. Faculty and librarians are encouraged to collaborate on all stages of the course including choosing course texts, devising effective research assignments, and planning and teaching information literacy sessions. This partnership is highlighted on the University Writing Program (UWP) website:

Each section of UW20 is assigned a librarian from the Gelman Library System and assessments have shown that students profit from librarians' involvement by gaining the skills and confidence as researchers that will serve them well throughout their college career. As they participate in class sessions throughout the semester, librarians help students develop core information literacy skills, improving their ability to locate, evaluate, and use information as independent, life-long learners. Collaborating with the course instructor, the librarian conducts in-class sessions on various aspects of research, such as topic formulation, search strategy, and the evaluation of sources. In addition, the librarian may meet regularly with students in one-on-one and small group settings, to provide guidance as students work through their research projects. ¹⁹

In the summer of 2005 the researchers conducted an exploratory study at GWU, which initially set out to assess terms that might be interpreted in divergent ways by first-year writing faculty and instruction librarians. The study used a convenience sample, which is defined as a group of individuals who are available for the study and those eligible to participate were first-year writing faculty and instruction librarians at GWU. To recruit participants, a brief description of the study was developed and distributed to the first-year writing program listsery. Members of the listsery include all UWP faculty and instruction librarians. During the 2004-2005 academic year this included fifteen full-time and ten part-time faculty, four graduate teaching assistants, and eight instruction librarians. One of the goals of the research was to interview faculty and librarians who had collaborated in the past academic year and who represented a range of teaching philosophies. To help meet this goal, the researchers also proactively asked select

faculty and librarians if they were interested in participating. Four UWP faculty and three instruction librarians (coded Faculty 1-4 and Librarian 1-3) were interviewed. The participants included three men and four women, who represented a range of scholarly backgrounds and academic ranks.

Before the interviews were conducted, the researchers collected syllabi and writing assignments from the faculty participants and research session lesson plans from the librarians. During the two-hour long interviews, each participant was asked to describe their own academic training, explain the steps they took to complete a recent research project, and offer their pedagogical approaches to various stages of the research process. The interviews were recorded and transcribed. The transcripts, which averaged 16 pages each, were read multiple times to code and identify themes. While reviewing the transcripts the researchers discovered a significant amount of information on the research process as described by the all the participants and noticed how descriptions of the process varied between the faculty and librarians. This led the researchers to change from their initial focus, how faculty and librarians used terms in divergent ways, to the timing of the research question.

Results

A Good Research Question

Before the differences in the timing of the research question are discussed, it is important to first uncover what faculty and librarians feel are the qualities of a good research question. Participants were asked to describe a good research question and faculty and librarians agreed that it must be complex, worth answering, and interesting to the student.

The first quality of a good research question is that it should be complex. Librarian 2 stated that the research question should be "more than a yes/no answer" while Faculty 1 stated, "the answer

[to a good research question] is not immediately obvious." More specifically, Faculty 4 said "There's going to be a way of looking at something, rather than an answer." For Faculty 4, a good research question does not direct one to more complex answers; rather, the research project forces one to reflect on the multiple ways that people think about the topic in the first place. She said that when students start to see the complexity of their topic, they realize that there will not be an answer, and that that is where the most interesting work lies.

Second, a good research question should be worth answering. When evaluating the worth of a research question, faculty and librarians often refer to the project's intended audience. Faculty 3 said, "I want students to be thinking about not just talking to other academics, but talking to a wider public." He continued by discussing how the topic should be relevant, and that the student should be able to explain it and have it be interesting and compelling to other people. Librarian 1 agreed stating that it "should confer some added value and meaning to the audience. I encourage students also to don't just think of your interests, think about your intended audience and the message you want to convey."

The final quality of a good research question is that it is interesting to the student. For example, Librarian 1 started his answer by saying that "a good research question first and foremost has to engage the interest of the researcher." This sentiment was echoed by Librarian 3 who said "I think #1 is something that the student wants to answer, something they're interested in." While all of the librarians in the study explicitly stated the research question should be interesting to the student, none of the faculty did. Instead, faculty took students' interest in a topic for granted. All faculty mentioned specific examples of their work with students over the course of the semester in which the students' engagement with the topic was taken as a measure of their interest in the topic.

The Timing of the Research Question

Although faculty and librarians agree on the qualities of a good research question, they disagree about whether it needs to be in the form of a question and if so, when this should occur. Faculty members talked about the process of narrowing down a topic to a question, and how this can occur over the better part of the semester. On the other hand, the librarians stated that a student's topic needs to be narrowed down as one of the initial steps.

The value of having a specific research question, according to the librarians, is that the process of writing out the question helps students identify more specific search terms and a rhetorical purpose. The following quote from Librarian 2, which describes working with a student to develop a research topic, demonstrates this interconnection. The research assignment was to identify and analyze a "contact zone" and was derived from Mary Louise Pratt's article "Arts of the Contact Zone".

I ask students what their topic is, and they say . . . "My topic is the contact zone." And I'm like, OK, that's really large, let's expand on that. Did you read the article and what do you want to explore with that?" They say, "My topic is the contact zone and shopping malls." And I say, "Ok, let's try and put this as a question, because you want the paper to answer a question or attempt to answer a question. And sometimes you can't, but at least you go in that direction." And it's so hard to get my students to think, "I want to write about how." This took about three student office hours to think about: "My paper topic was how Hispanic mall employees that work in the dining area, how do they see themselves in their contact zones with the customers." But it did take three office hours. Because I think, the students get upset, "I just want to get started with the research; why don't we just put in *contact zone* and *mall* [as terms in a database search]"? It's like, "All right, try it—did you find anything? No? OK, so let's keep working on this."

The key work in this scenario is helping the student to identify key concepts that will guide the research and to come to see the project as an analytical one that focuses on how rather than what. The librarian helps the student narrow down the project so that the librarian can use the key terms to direct students to appropriate subject-specific article databases. Librarian 3 agreed with

this approach saying that a good research topic must be specific enough that the student wants to answer it. She felt that a general question lacks direction and a good research question "prevents [students] from getting incredibly frustrated at the first level of research, because otherwise I think they just want to quit or change their topic. 'There's too much or not enough, and I want to change.'" Librarian 1 was more emphatic. For him, the starting point

has to be manageable and focused, very definitely . . . Students tend, as we all know, to take very ambitious topics. So this is the challenge. And very often, in fact, the instructor, not necessarily UW20, have embraced or endorsed a topic that is very vaguely formulated. The student invariably runs into problems because they are overwhelmed with information. So the manageability issue is very critical, and this is where I think the librarian plays a very important role, in trying to show the student techniques of how to hone down the topic within the other constraints of information and the expectations. So that is a central challenge: a topic has to be manageable in order for students to deal with it effectively.

From the librarians' perspective, starting narrow prepares students for the research process because it provides direction and rhetorical purpose. Yet it is important for librarians and faculty to recognize that students need to experience the uncertainty and anxiety inherent in research. In contrast, faculty describe the initial stages of research in more fluid terms and seem comfortable when students invest an extended period of time and effort arriving at a workable research focus. For them, the starting point is not a narrow question but rather a large and admittedly unwieldy one that must be honed down through research as the student becomes familiar with the materials and the discourse of the issue. In other words, the faculty seem to concur with Librarian 1 that they have "embraced or endorsed a topic that is very vaguely formulated," but they consider this an asset and a way to introduce students to the real research involved in formulating a site of inquiry. Once again, this matches with Kuhlthau's third stage of the ISP, prefocus exploration. It is during this stage that students seek out a variety of information from many different sources which can lead them to the fourth stage, focus

formulation.²² An example of how faculty lead students through this process is described by Faculty 4 as she talks about the initial stages of a student's research project on pornography. When the student begins with a question like "is porn good or bad?" Faculty 4 directs her to read several authors and to find out what's at stake in the question itself and think about who is writing about this topic and what their investment is. Faculty 4 explains that she talks to students about their projects this way:

You're going to start with a series of questions that you're interested in exploring. They're probably going to be very general. They will become more specific as you develop more specific interests and as you start to know an area or a debate or a field or whatever you are looking at, you will refine them. A good research question is one that will develop.

Faculty 4 tells students at the beginning of their research that they probably won't really know their question until the last weeks of the semester, when they will also know their arguments. She tells the students that they're not going to start with an argument but that through their research they will find arguments. According to Faculty 4 the student's contribution "will be to take different approaches, the different perspectives, the different ways that people are arguing and come up with a different way of thinking. And that's where your argument emerges."

Faculty 2 describes a similar experience with a student who examined the ethos of magazines targeted to women and girls. The student began with very general research questions about how magazines target a general audience and she progressively narrowed down her question to how magazines target teen audiences, then to how they target teen girls, finally focusing on how women's magazines target girls. In each iteration the student examined the primary materials and evaluated whether or not the question was going to be productive and in each iteration she came back to her professor for more guidance when her question seemed unproductive. As with

Faculty 4, Faculty 2 sees this process as normal and valuable. (The italicized part is the researcher's question):

I don't think there's an ideal beginning research question, I think that is a process that you go through to hone it down to something that becomes doable. *And that process happens over a long period of time?* Over a long period of time, yeah.

Discussion

Why might faculty and librarians have these different approaches to the timing of the research question? This research found that this difference could be due to differences in the research process of faculty and librarians and how they themselves develop research questions. Both faculty and librarians agree that an appropriate research project in their own area study goes beyond reporting and includes an analysis.

However, the research projects the librarians described are more focused on particular audience needs. For example, they investigate and share better pedagogical techniques for library instruction with other librarians. For the most part librarians seemed to prefer a more structured research process in their own work and prefer to teach a more methodical approach to research to first-year students. For faculty in the UWP, the majority of their projects study how people and cultures exchange knowledge. When faculty describe their own research process it is similar to those documented in other studies as typical for "expert" researchers. Their methods rely on prior knowledge and celebrate serendipitous encounters. While only one faculty member states his research in the form of a question, all the faculty and librarians in the study describe their projects using specific key terms with an awareness of rhetorical purpose; they focus on *how* or *why* or *what's at stake*.

That faculty and librarians themselves conduct research for different purposes does not necessarily mean that they carry these conceptions into their interactions with first-year students.

But their own research projects and process could provide a backdrop against which they unconsciously construct their ideal of a "good" research process, including when a research question should be developed. For example, when the research context is defined in terms of the needs of a specific audience and pragmatic purpose—as is the case in the librarian's projects—the scope of the project is much more manageable: librarians make this point in arguing for more focused starting points in student research.

So what do students need? In our study Faculty 1 and Librarian 1 differ sharply in their characterization of what students need. Faculty 1 insists that students cannot know what they need at the beginning of the project; like Faculty 2 and 4 above, he considers the first stages of research to be a place of discovering what one needs. In contrast, Librarian 1 seems to reiterate the position of Librarian 3, earlier: students need to sit down with librarians and professors to hone their questions and rhetorical purposes, because such a process helps delimit the scope of the research, which allows the librarian to direct them to appropriate sources.

These differences are highlighted by two quotes. First Faculty 1 discussed how students can best use the library:

... [A]t some stages in your research, the library is the place to go to get what you need. Late in the term. And when those moments come, I actually tell them, "Now, now you need reviews of that movie from the 1930s; that's what you need right now for this part of your paper where you don't have any sources but you want to say this movie was junk." So that's what you need, that's one of those moments. But those moments are discrete, fact-finding missions. But that's not what happens in the beginning of the research paper. So the whole beginning of the half of the semester is "the library is the place that can help you figure out what you *might* need."

In contrast, Librarian 1 expects students to know the kinds of sources they will need sooner. He discusses student need when he describes the steps of an "efficient" research methodology that he teaches students:

I'd say, contemplate your final product. What elements does it have? Envision it. Think about your audience. Put yourself as best you can in the eyes of your audience. Pretend you are reading your paper. What would your expectations be? That would help them anticipate the content of their paper. And so they'd say, "well, I envision having data sources" or newspaper articles and so forth. And once they have some sort of notion of the kinds of sources they need, then I can help direct them to the appropriate tertiary sources, the databases that will help them accomplish what they need.

Note that the overall arc of the writing and research process seems to be parallel in these examples: both the librarian and the faculty expect that the writing project will come together once students have a grasp of their rhetorical purpose in taking on the project and when they recognize how particular resources will help them most effectively make their arguments. In Faculty 1's example, the student recognizes a need for discreet information resources only after she or he has developed an argument that now requires particular proof. For Librarian 1, considering the organization of the overall argument helps the student understand the kinds of sources that will be needed. The difference centers on timing: at what point should a writer consider his or her audience?

Conclusion

This exploratory study found a disconnect between first-year writing faculty and instruction librarians about the optimum timing of the research question. Faculty seemed to prefer that students explore an issue for some time before settling on a research question, whereas librarians preferred that students narrow down their topics early in the process. The researchers' recommendation is for faculty and librarians who teach collaboratively to meet and explicitly discuss their expectations for when students will arrive at their research question, what that question might look like, and what roles the faculty and librarian will play in guiding them to a research focus.

How can faculty and librarians better communicate with each other about the dovetailing yet distinct nature of their work with students during the research process? What follows are several suggestions for how faculty and librarians who plan to teach together can better communicate and collaborate. First, it is important for a faculty member and a librarian to meet, either in person or on the phone, to discuss the course and goals of the research assignment. At this meeting the faculty member and librarian should talk about the research methods they themselves use as a way of noticing common and different elements. This conversation may also start to expose any unstated assumptions about how students should conduct research. Expectations about timing of the research question should be discussed at this point. A second suggestion is for faculty and librarians to consider how they can support students at the exploratory, or selection, stage of research. What type of activities or assignments can assist students during the exploratory process? A third suggestion is to have continuing conversations during the course of the semester. While it can be difficult to maintain frequent communication, it can enhance the understanding of any struggles that students may be facing and the best way to assist them. In the UWP, faculty and librarians communicate frequently during the course of the semester, focusing on student progress and where the students are in the research process. The findings from this study need to be tested with faculty and librarians from a range of colleges and universities, as attitudes about research can be expected to vary depending on the pedagogical approach of the writing program, the number of full-time, part-time, and GTA faculty, and the nature of faculty contracts. However, it is clear that they ways in which faculty and librarians see their work and each other have important implications for how they conceptualize and present the research process to students.

Notes and References

- 1. Carol C. Kuhlthau, "Inside the Search Process: Information Seeking from the User's Perspective," *Journal of the American Society for Information Science* 42, no. 5 (1991): 366.
- 2. Ibid., pp. 368.
- 3. Ibid., pp. 370.
- 4. Marcia J. Bates, "The design of browsing and berrypicking techniques for the online search interface," *Online Review* 13(1989): 410.
- 5. Ibid.
- 6. Lynn Kennedy, Charles Cole, and Susan Carter, "The False Focus in Online Searching: The Particular Case of Undergraduates Seeking Information for Course Assignments in the Humanities and Social Sciences," *Reference & User Services Quarterly* 38 (Spring 1999): 270. Retrieved from Academic OneFile (accessed November 25, 2009).
- 7. Sonia Bodi, "How Do We Bridge the Gap Between What We Teach and What They Do? Some Thoughts on the Place of Questions in the Process of Research," *Journal of Academic Librarianship* 28 (May 2002): 111. Retrieved from Academic Search Premier (accessed August 24, 2009).
- 8. Ibid., pp. 112.
- 9. David Rosenwasser and Jill Stephen, *Writing Analytically* (Boston, MA: Thomson Wadsworth, 2006): 163.
- 10. Ibid., pp. 164.
- 11. Ibid., pp. 168.

- 12. Joseph Bizup, "BEAM: A Rhetorical Vocabulary for Teaching Research-Based Writing," *Rhetoric Review* 27 (2008): 81. Retrieved from Academic Search Premier (accessed October 19, 2009).
- 13. Andrea A. Lunsford, *The Everyday Writer*, (New York: Bedford/St. Martin's, 2005): 142.
- 14. Diana Hacker, A Writer's Reference, (New York: Bedford/St. Martin's, 2003).
- 15. M. J. Braun and Sarah Prineas, "First-Year Composition as an Introduction to Academic Discourse," in *Strategies for Teaching First-Year Composition*, edited by Duane Roen, Veronica Pantoja, Lauren Yena. Susan K. Miller, and Eric Waggoner (Urbana, IL: National Council of Teachers of English, 2002): 570-582.
- 16. Ibid., pp. 574-575.
- 17. Ibid.
- 18. Jennifer E. Nutefall and Phyllis Mentzell Ryder, "Teaching research rhetorically," *Academic Exchange Quarterly* 9 (4, 2005): 309.
- 19. University Writing Program, "UW20 Template." *First-Year Writing*. 2008. http://www.gwu.edu/~uwp/fyw/uw20-template.html (accessed May 17, 2009).
- 20. Jack R. Fraenkel and Norman E. Wallen, *How to design and evaluate research in education* (New York: McGraw Hill, 1993): 87.
- 21. Mary Louise Pratt, "Arts of the Contact Zone," *Profession* (1991): 33-40. Retrieved from http://www.class.uidaho.edu/thomas/English_506/Arts_of_the_Contact_Zone.pdf (Accessed December 29, 2009). She uses the term contact zone to describe social spaces where "cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism, slavery, or their aftermaths as they are lived out in many part of the world today." (p. 1).

- 22. Carol Collier Kuhlthau, *Seeking Meaning: A Process Approach to Library and Information Services* (Westport, CT: Libraries Unlimited, 2004): 47.
- 23. See Sonia Bodi, "How do we Bridge the Gap Between What We Teach and What They Do? Some Thoughts on the Place of Questions in the Process of Research," *Journal of Academic Librarianship* 28 (May 2002): 109-114; Gloria Leckie, "Desperately Seeking Citations: Uncovering Faculty Assumptions about the Undergraduate Research Process," *Journal of Academic Librarianship* 22 (May 1996): 201-208; and Barbara Fister, "The Research Process of Undergraduate Students," *The Journal of Academic Librarianship* 18, no. 3 (1992): 163-169.